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| 10/826,037 | 04/15/2004 | Mingliang Lawrence Tsai | 30-4677 DIV-1 (4760) | 9059 |

7590 10/15/2004

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EXAMINER

ZACHARIA, RAMSEY E

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| ART UNIT | PAPER NUMBER |
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1773

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,037

Applicant(s)

TSAI ET AL.

Examiner

Ramsey Zacharia

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 13-18, 20-24 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) 16-18, 20-24, 26 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 13-15 and 28-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/15/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on 16 September 2004 is acknowledged. The traversal is on the ground(s) that there is no showing of distinctness between the inventions of Groups I and II. Moreover, the applicants argue that 37 C.F.R. 1.141(b) specifically authorizes examination of product claims together with claims for one process specially adapted for the use of that product. This is not found persuasive because as a product and process for making the product, the inventions of Groups I and II are distinct if it can be shown that the product as claimed can be made by another materially different process. Since the product of Group I can be made by a materially different process (e.g. by laminating as opposed to coextrusion) the inventions of Groups I and II are distinct. Furthermore, 37 C.F.R. 1.141(b) applies to situations in which a product, process of making the product, and process of using the product are claimed. These conditions are not met by the instant application which has claims directed to a product, a first process of making the product, and a second process of making the product.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 16-18, 20-24, 26, and 27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 16 September 2004.

Information Disclosure Statement

3. In the Information Disclosure Statement filed 15 April 2004, reference AH has been lined through because it is the same as initialed reference AC.

Specification

4. The specification is objected to because of informalities such as: an incorrect filing date is recited for application 09/603,151 (June 23, 2003 is listed but the correct filing date is June 23, 2000) in the cross-reference section on the first page of the specification, etc. The applicants are also requested to update the cross reference information in the first paragraph of the specification.

The applicant is requested to review the application thoroughly and make all appropriate corrections.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, 11, 13-15, and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. Patent 5,139,878) in view of Beer et al. (U.S. Patent 6,329,047).

Kim et al. teach a multilayer film comprising a fluoropolymer film, a thermoplastic polymer film, and an adhesive layer between each film. Homopolymers and copolymers of chlorotrifluoroethylene are preferred as the fluoropolymer material because they have exceptional gas and moisture barrier properties and outstanding transparency (column 3, lines 1-6). A suitable material for the adhesive layer is a polyolefin modified with a carboxylic acid or acid anhydride (column 4, lines 64-68). Maleic anhydride is the preferred anhydride (column 5, lines 22-23). The multilayer film can have a variety of structures including the five-layer structure: thermoplastic/adhesive/fluoropolymer/adhesive/thermoplastic (column 6, lines 42-54). The films may be formed by coextrusion (column 7, lines 1-14). The film may be heated and formed, i.e. thermoformed, into three-dimensional products (column 8, lines 18-22). The film may also be uniaxially or biaxially oriented (column 7, line 66-column 8, line 17).

Regarding claim 9, while Kim et al. do not explicitly teach an embodiment wherein the fluoropolymer layer has a second thermoplastic layer bonded to it, an embodiment having five layer is disclosed and it is explicitly taught that any variation on the order of the layers can be made. Therefore, it would have been obvious to one of ordinary skill to adhere a second fluoropolymer film to the thermoplastic layer in applications where additional gas and moisture barrier properties are desired for the final product.

Kim et al. do not teach the use of a cyclic polyolefin as the material for the thermoplastic polymer film. However, Kim et al. do teach any thermoplastic material may be used which features good strength and polyolefins are cited as among the preferred polymers (column 3, lines 7-40) and Kim et al. explicitly teach that polyvinyl chloride (PVC) and polypropylene may

Art Unit: 1773

be used as the thermoplastic material (column 3, line 27). Kim et al. further do not teach the degree of uniaxial or biaxial orientation.

Beer et al. is directed to a packaging film suitable for use in blister packs (column 1, lines 62-67). The data presented in Table 1 of Beer et al. demonstrate that cyclic polyolefins provide better water vapor barrier properties than polyvinyl chloride (column 2, lines 60-65). Moreover, Beer et al. discloses that cyclic polyolefins have better processability in blister pack formation than polypropylenes (column 1, lines 37-47). Suitable cyclic polyolefins include from 0.1-100% of a cyclic olefin and 0-99.9% of an acyclic olefin (column 3, line 3-column 4, line 37). Compositions comprising 100% cyclic olefin constitute cyclic olefin homopolymers while those comprising less than 100% cyclic olefin constitute cyclic olefin copolymers. A particularly preferred cyclic polyolefin is a copolymer of ethylene and norbornene (column 5, lines 19-20). Beer et al. further teach that monoaxially or biaxially orienting cyclic polyolefin films improves their processability and increases their puncture resistance (column 7, lines 27-49).

One of ordinary skill in the art would be motivated to use the cyclic polyolefin of Beer et al. as the thermoplastic of Kim et al., as opposed to a material such as polyvinyl chloride or polypropylene, to yield a laminate with improved water vapor barrier properties and good processability.

Regarding claims 6 and 7, while Beer et al. do not disclose a particular degree of orientation that should be used, the degree of orientation is taught to be a variable that affects the processability and puncture resistance of the resulting film (column 7, lines 27-49). That is, the degree of orientation is disclosed as a results effective variable. As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the

Art Unit: 1773

degree of uniaxial or biaxial orientation of the film, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 32 and 33, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the applicants to present evidence from which the examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974). Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and MPEP § 2113. In this case, although Kim et al. do not teach forming the film by first coextruding the fluoropolymer layer and the adhesive followed by attaching the other surface layer, the resulting product appears to be the same as the product defined by product-by-process claims 32 and 33. As such, the burden is on the applicants to conclusively demonstrate that the products are different.

7. Claims 1, 3, 13, 14, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muggli (U.S. Patent 6,138,830) in view of Schmiletzky (U.S. Patent 5,360,116).

Art Unit: 1773

Muggli is directed to a blister pack packaging (column 1, lines 5-10). The blister pack may comprise a laminate of two or more plastic films, such as cyclo-olefin copolymer and polychlorotrifluoroethylene, adhered together by means of an adhesive, a laminating adhesive, or a bonding agents (column 2, lines 33-48).

Muggli is silent with respect to the type of adhesive that may be used. However, Muggli does teach that a laminating adhesive may be used (column 2, lines 37-39).

Schmiletzky is directed to blister packs (abstract). Schmiletzky discloses that a polyurethane is a suitable laminating adhesive for use in blister packs (column 6, lines 4-11).

Schmiletzky shows that polyurethane is at least equivalent to other laminating adhesives used in blister packs. Therefore, because polyurethane was art-recognized as an equivalent laminating adhesive at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute polyurethane as the laminating adhesive in the blister pack of Muggli.

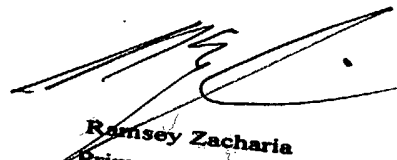
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramsey Zacharia
Primary Examiner
Tech Center 1700